Joro Walker, USB #6676
David Becker USB #11037
WESTERN RESOURCE ADVOCATES
425 East 100 South Street
Salt Lake City, Utah 84111
Telephone: 801.487.9911
Fax: 801.486.4233
Attorneys for Utah Chapter of the Sierra Club

**BEFORE THE UTAH AIR QUALITY BOARD**

| | | |
|---|---|---|
| In Re: Approval Order – PSD Major Modification to Add New Unit 3 at Intermountain Power Generating Station, Millard County, Utah Project Code: N0327-010 DAQE-AN0327010-04 | : | SECOND AMENDED REQUEST FOR AGENCY ACTION |

**SECOND AMENDED REQUEST FOR AGENCY ACTION**

Pursuant to Utah Administrative Code R307-103-3(1) and Utah Code § 63-46b-3(3), the Utah Chapter of the Sierra Club (Sierra Club) hereby files its Second Amended Request for Agency Action with Richard W. Sprott, Executive Secretary of the Utah Air Quality Board. The Sierra Club seeks review of the October 15, 2004 decision by the Utah Division of Air Quality and the Executive Secretary (collectively "UDAQ" or "DAQ") to issue an Approval Order (AO) granting a Prevention of Significant Deterioration (PSD) permit to Intermountain Power Service Corporation (IPSC) to construct and operate an additional 950 megawatt (MW) coal-fired power plant Unit #3 at the Intermountain Power Plant in Millard County, Utah (DAQE-AN0327010-04)(Project Code: N0327-010). Pursuant to Utah Admin. Code R307-103-3(2), R307-103-6(2)(c), and R307-103-3, the Sierra Club relies on the Statement of Standing/Petition to Intervene previously submitted with its First Amended Request for Agency Action.

## I. Permit Number and Date of Mailing

As mentioned above, Sierra Club is contesting the Approval Order signed by Richard W. Sprott, Executive Secretary of the Utah Air Quality Board, on October 15, 2004 to authorize the construction and operation of an additional 950 MW coal-fired power plant unit at the Intermountain Power Plant in Millard County, Utah (DAQE-AN0327010-04)(Project Code: N0327-010). According to UDAQ, the date of mailing of the AO is October 15, 2004.

On August 4, 2006, the Utah Associated Municipal Power Systems (UAMPS) made a request by letter to DAQ notifying the agency of UAMPS's intent change the technology for the proposed IPSC Unit 3 from a subcritical to supercritical pulverized coal fired boiler. On August 17, 2006, DAQ responded that if found "in accordance with Condition 7 of the Approval Order number DAQE-AN0327010-04, a supercritical PC boiler is equivalent to the permitted unit," Letter from Rick Sprott to Doug Hunter, August 17, 2006, thereby approving the project changes. Sierra Club learned of the IPSC request on October 13, 2006 and of DAQ's decision to approve the IPSC request on October 17, 2006 when it received an emailed copy of the August 17, 2006 DAQ approval letter.

## II. Statement of Legal Authority and Jurisdiction

Sierra Club brings this Request for Agency Action pursuant to Utah Admin. Code R307-103-3(1), which states that "[i]nitial orders and notices of violation, as described in R307-103-2(1)[1], may be contested by filing a written Request for Agency Action to the Executive Secretary, Air Quality Board, Division of Air Quality . . . ." Utah Code § 63-46b-3(3) specifies the content of this Request for Agency Action.

## III. Statement of Facts and Reasons

### A. Statement of Facts

On December 16, 2002 and May 14, 2003, IPSC submitted a Prevention of Significant Deterioration (PSD) permit application and its Notice of Intent (NOI) to add a 950 MW coal-fired unit to its existing Intermountain Power Plant, near Delta, Utah. The additional unit at Intermountain Power Plant (IPP Unit 3 or Unit 3) would result in a significant net emissions increase of carbon monoxide (CO), nitrogen oxides ($NO_x$), sulfur dioxide ($SO_2$), particulate matter with an aerodynamic diameter equal to or less than 10 micrometers ($PM_{10}$), volatile organic compounds (VOCs), lead, sulfuric acid mist ($H_2SO_4$), total reduced sulfur, and reduced sulfur compounds. Thus, the proposed coal-fired power plant unit is a "major modification" to the Intermountain Power Plant for those pollutants. The area in which the facility is to be located is currently designated as having attainment status for all pollutants. Therefore, the additional unit is required to meet the provisions of Utah's PSD regulation, Utah Admin. Code R307-405, in addition to other applicable provisions of the Utah Admin. Code, including the requirements of a Notice of Intent and Approval Order established by Utah Admin. Code R307-401.

IPP Unit 3 has the potential to emit at least 25 tons per year of hazardous air pollutants (HAPs). Therefore, the additional unit is considered to be a major source of

[1] Utah Admin. Code R307-103-2(1) defines an initial order as, *inter alia*, "approval, denial, termination, modification, revocation, reissuance or renewal of permits, plans, or approval orders." Utah Admin. Code R307-103-2(1)(a). This Second Amended Request for Agency Action covers both the October 15, 2004 Approval Order and the August 17, 2006 Modification of the Approval Order.

HAPs and subject to Utah's provisions for case-by-case determination of maximum achievable control technology (MACT) limits for HAPs, pursuant to Utah Admin. Code R307-214-2.

Because the additional unit will be an electric utility steam generating unit capable of combusting more than 73 MW heat input of coal, the facility is subject to the New Source Performance Standards (NSPS) of 40 C.F.R. Part 60, Subpart Da, which Utah has incorporated by reference into state regulation at Utah Admin. Code R307-210-1.

The Sierra Club has been involved throughout the permitting process for the proposed IPP Unit 3. On April 14, 2003, the Sierra Club submitted extensive comments on the proposed project in advance of the public comment period, detailing the permitting requirements pertaining to the permit application. The Sierra Club participated in a UDAQ public hearing held in Delta, Utah on April 29, 2004. In addition, on May 20, 2004 and within the designated public comment period, the Sierra Club submitted extensive comments on the UDAQ Intent to Approve (ITA) the PSD permit for IPP Unit 3. Following the re-opening of the comment period, the Sierra Club supplemented its May 20, 2004 comments with additional comments submitted on June 30, 2004 and July 16, 2004.

On October 15, 2004, Richard W. Sprott, Executive Secretary of the Utah Air Quality Board, signed the AO authorizing construction and operation of the proposed 950 MW IPP Unit 3. According to the AO, the operation of the power plant would allow air emissions increases, in tons per year, of: 496.5 of $PM_{10}$; 2,775 of $NO_x$; 3,567.5 of $SO_2$; 5,946 of CO, and 107 of VOCs, and 199 of HAPs. With the AO, UDAQ released two memoranda titled "Response to Comments received on IPSC Intent to Approve number DAQE-IN327010-04," authored by Milka Radulovic, Environmental Engineer, and "Technical Analysis response to comments received on IPSC's Intent to Approve number DAQE-IN3227010-04," authored by Tom Orth, Air Quality Modeler.

On August 4, 2006, the Utah Associated Municipal Power Systems (UAMPS) made a request by letter to DAQ notifying the agency of UAMPS's intent change the technology for the proposed IPSC Unit 3 from a subcritical to supercritical pulverized coal fired boiler. On August 17, 2006, DAQ responded that if found "in accordance with Condition 7 of the Approval Order number DAQE-AN0327010-04, a supercritical PC boiler is equivalent to the permitted unit," Letter from Rick Sprott to Doug Hunter, August 17, 2006, thereby approving the project changes. Sierra Club learned of the IPSC request on October 13, 2006 and of DAQ's decision to approve the IPSC request on October 17, 2006 when it received an emailed copy of the August 17, 2006 DAQ approval letter.

DAQ issued its August 17, 2006 letter without first providing public notice and comment on the significant project changes proposed by IPSC to the Unit 3 facility. On November 13, 2006, Sierra Club mailed and emailed a formal request to Rick Sprott, Executive Director of DAQ responding to the project changes for the IPSC Unit 3 facility

and requesting that DAQ notify the public of those changes and designate a comment period for the public to respond to those changes. On November 15, 2006 Rick Sprott denied that request.

**B. Statement of Reasons**

As set forth below and in the Sierra Club's comments, UDAQ's approval of IPSC's PSD permit fails to comply with the Clean Air Act, the Utah Air Conservation Act, and the Utah Administrative Code. The Sierra Club hereby incorporate and reference their comments dated April 14, 2003, May 20, 2004, June 30, 2004, and July 16, 2004, and the documents submitted in support of those comments.

In addition, the Sierra Club sets forth the basis for its request for agency action below:

**1. UDAQ Failed to Consider Adequately Integrated Gasification Combined Cycle (IGCC) in its BACT Determination and Failed to Require the Production Process for IPP Unit 3.**

Integrated Gasification Combined Cycle (IGCC) is a method of producing electricity by gasifying coal, removing pollutants – including greenhouse gases – before combustion, and then burning the "clean" syngas in a modified combined cycle gas-fired power plant. IGCC is an available, demonstrated, clean coal combustion technology with significant emission reduction benefits.[2] As such, UDAQ is required to evaluate this technology comprehensively as part of its BACT analysis. The agency, however, claims otherwise.

To argue that it is not required to evaluate IGCC as part of BACT, UDAQ contends that "the scope of the BACT analysis is limited to control technologies that can be applied to the emission unit proposed by the applicant." Response to Comments at 7, #12. However, UDAQ's interpretation of the BACT analysis requirement is erroneous. Consideration of inherently lower emitting power production processes and techniques such as IGCC is required by Utah Admin. Code R307-101-2, the state regulation defining BACT. Legislative history, EPA guidance, the actions of regulators in other states, and other relevant considerations additionally confirm that because consideration of the process design is a necessary part of the BACT analysis, thorough evaluation of IGCC is mandated.

UDAQ also contends that while it was not required to consider IGCC in its BACT analysis, the evaluation was done. Response to Comments at 7, #12. This analysis – a

[2] The Sierra Club has, in its May 20, 2004 comments on the ITA for the IPP project, detailed the basis for this and other statements regarding the need to evaluate IGCC as part of a proper BACT analysis for IPP. Because the organizations have already referenced and incorporated those comments into their Request for Agency Action, they will not repeat those detailed arguments here.

top-down review comparing the proposed pulverized coal-fired power plant to both circulating fluidized bed and IGCC plants of similar size – is legally and technically inadequate. *See* Appendix I-8 of the NOI. It contains fundamental flaws in both methodology and assumptions, as well as significant mathematical errors. These flaws result in a greatly overstated determination of the cost of IGCC and the amount of pollutants emitted by IGCC. These errors are compounded by an improper method of calculating incremental costs that, when taken together with the other errors, exaggerate the incremental costs of pollution removed by the IGCC plant by two orders of magnitude.

To the extent that UDAQ suggests that it has now revised its review of IGCC for the purposes of BACT, Response to Comments at 8, #14, this revision is inadequate for the purposes of state and federal law. For example, this review was not subject to public notice and comment. Moreover, because the Sierra Club has not had the opportunity to assess the revised analysis, they reserve the right to challenge its content. Because UDAQ states that this revised analysis determined IGCC is not appropriate for IPP Unit 3, the conclusions of the evaluation are incorrect.

Finally, as the Sierra Club makes clear in its May 20, 2004 Comments, the analysis required by law shows that IGCC **is** BACT for IPP Unit 3. This is because IGCC is an available technology, is technically feasible for the IPP project, and is the top ranked control technology. In addition, proper consideration of economic, environmental and energy impacts confirms that IGCC is BACT for IPP Unit 3.

In sum, UDAQ is required to consider IGCC exhaustively as part of its BACT analysis. The existing analysis, presented at Appendix I-8 of the NOI, is fatally flawed. The revised analysis errs in that it concludes IGCC is not appropriate for the IPP Unit 3. As a result, UDAQ has failed its statutory and regulatory duties to examine IGCC adequately and to require the Intermountain Power Service Company to utilize IGCC for its power plant expansion pursuant to a BACT determination. Until UDAQ takes these steps, the AO is illegal and should be rescinded and/or remanded to the agency for proper BACT analysis.

**2. UDAQ Failed to Consider Adequately a Supercritical PC Boiler in its BACT Determination and Failed to Require Installation of this Technology for IPP Unit 3.**

For essentially the same reasons provided above, UDAQ's consideration of supercritical PC boiler technology is legally inadequate and therefore the AO is fatally flawed. Supercritical boilers are up to 7% or more efficient than subcritical boilers. As a result, they use less fuel and emit less carbon dioxide. Further, such supercritical boilers achieve up to 17% lower emission rates of carbon monoxide (CO), nitrogen oxides (NOx) and sulfur oxides (SOx), as well as up to 15% lower PM emission rates.

Yet, UDAQ argues that it need not analyze this technology as part of its BACT determination. Response to Comments at 8, # 15. The agency's conclusion is flawed.

Consideration of inherently lower emitting power production processes and techniques such as supercritical boiler is required by Utah Admin. Code R307-101-2, the state regulation defining BACT. Legislative history, EPA guidance, the actions of regulators in other states, and other relevant considerations additionally confirm that because consideration of the process design is a necessary part of the BACT analysis, thorough evaluation of this technology is mandated.

To the extent that UDAQ suggests that it has now revised its review of supercritical boiler technology for the purposes of BACT analysis, Response to Comments at 8, #15, this revision is inadequate for the purposes of state and federal law. For example, this review was not subject to public notice and comment. Moreover, because the Sierra Club has not had the opportunity to assess the revised analysis, they reserve the right to challenge its content. Because UDAQ states that this revised analysis determined that a supercritical boiler is not appropriate for IPP Unit 3, the conclusions of the evaluation are incorrect.

Rather, evaluation of supercritical boilers is required, as this technology, although inferior to IGCC, is an available technology, is technically feasible for the IPP project, and is a better ranked control technology than that currently proposed for Unit 3. In sum, UDAQ is required to consider supercritical boiler technology exhaustively as part of its BACT analysis. The revised analysis errs in that it has not been subject to public comment and it concludes this technology is not appropriate for the IPP Unit 3. As a result, UDAQ has failed its statutory and regulatory duties to examine supercritical boiler technology adequately and to require the IPSC to utilize a supercritical boiler pursuant to a BACT determination. Until UDAQ takes these steps, the AO is illegal and should be rescinded and/or remanded to the agency for proper BACT analysis.

**3. UDAQ Erroneously Failed to Address Carbon Dioxide and Other Greenhouse Gas Emissions.**

In approving the construction and operation of IPP Unit 3, UDAQ did not address or set limits on carbon dioxide ($CO_2$) or other greenhouse gas emissions from the new unit. Typically, coal-fired boilers emit significant greenhouse gases. Yet, UDAQ declined to address greenhouse emissions, based on its belief that it has no legal or regulatory duty to limit or control these emissions. Response to Comments at 9, #16. UDAQ's understanding of Utah law is misguided.

Pursuant to the Clean Air Act and Utah Air Quality Act and their implementing rules, the State of Utah is obligated to regulate greenhouse gases. Further, pursuant to the definition of BACT, Utah Admin. Code R307-101-2, the agency is required to consider environmental impacts, such as greenhouse gas emissions, when determining BACT for a facility. Because UDAQ did not address, set limits on, or factor greenhouse emissions into its BACT analysis, the agency has failed its statutory and regulatory duties. Until UDAQ takes these steps, the AO is illegal and should be rescinded and/or remanded to the agency for proper consideration and regulation of these gases.

**4. UDAQ Did Not Properly Set Sulfur Dioxide ($SO_2$) Emission Limits.**

In authorizing IPP Unit 3, UDAQ did not properly set emission limits for sulfur dioxide. The final Unit 3 AO imposes $SO_2$ limits of 0.10 lb/MMBtu (24-hr block average) and 0.09 lb/MMBtu (30 day rolling average). The administrative record does not support these limits, and UDAQ's adoption of these limits lacks support in the administrative record.

For example, these emission limits and corresponding control efficiencies are not reflective of the maximum degree of emissions reduction that can be achieved by the proposed SO2 control equipment, as required by the Utah definition of BACT. Utah Admin. Code R307-101-2 & R307-401-6(1). As Intermountain Power Service Company states in their NOI, such controls can achieve 98% $SO_2$ reduction. At best, the 0.10 lb/MMBtu $SO_2$ limit would equate to a 92% reduction in $SO_2$ emissions. Thus, the emission levels are too low.

UDAQ further suggests that it is purposefully setting relaxed $SO_2$ emission limits so that the source can meet them on a continuous basis. Again, this reasoning is not supported by law or fact. First, the record confirms that Unit 3 will be able to meet appropriately more stringent standards routinely – the control equipment is designed to do just that. Second, UDAQ admits that the $SO_2$ control efficiency necessary to meet the Unit 3 emission standards is **lower** than the efficiency of existing well-controlled sources, such as IPP Units 1 and 2. Indeed, the two existing IPP units are meeting 94.5% removal efficiency with a lower sulfur-content coal than the worst case "design coal" for Unit 3. Third, UDAQ bases a Unit 3 emission limit on worst case sulfur content. This means that the source, which will likely be burning cleaner coal the majority of the time, **will** be able to meet stricter emission limits.

UDAQ must include $SO_2$ removal efficiency requirements in the AO. This is because the $SO_2$ BACT emission limits are based on worst case uncontrolled $SO_2$ emissions. An efficiency requirement would ensure proper operation and maintenance of the scrubber regardless of the sulfur content in the coal and even when lower sulfur content coal is burned. Control efficiency requirements are further warranted because operation of IPP Unit 3 will adversely impact visibility at nearby Class I areas, including Capitol Reef National Park, where $SO_2$ increment violations are occurring. As a result of these concerns, the removal efficiency requirement should reflect, at the very least, what the wet scrubber can achieve – at a minimum 94.5% $SO_2$ removal efficiency.

Thus, UDAQ's relaxed $SO_2$ BACT emission requirements are not grounded in law or fact and are too lenient. Similarly, the agency's decision not require both emission limits **and** removal efficiency requirements is erroneous. As a result, the AO is illegal and should be rescinded and/or remanded to the agency for proper consideration and regulation of $SO_2$.

**5. UDAQ Failed to Require Coal Chemistry Data.**

IPSC's permit application did not contain precise coal chemistry data due to the fact that the corporation had not identified the actual coal to be burned at IPP Unit 3. The failure to include coal chemistry data prevents an accurate determination of percent removal efficiency limits, short term emission rates, and total mass emissions of pollutants such as mercury. Moreover, the description of the coal type and coal quality in the permit application is often vague and conflicting. Thus, reliance on such information by UDAQ is arbitrary and capricious. In the event IPSC plans to blend coal, the final permit should contain a coal quality/coal blending requirement. UDAQ wrongfully deleted such a provision from an earlier draft of the permit.

In summary, the permit application was fatally flawed by failing to include coal quality and/or coal blending information. The application also contained internally inconsistent information on coal quality. UDAQ erroneously issued a final permit without adequate coal quality data. For these reasons, the AO is illegal and should be rescinded and/or remanded to the agency.

**6. UDAQ Failed to Require Use of Continuous Opacity Monitoring Data to Ensure Compliance with the Visible Emissions BACT Limit.**

In the AO, UDAQ required that visible emissions from all baghouses (including the Unit 3 main boiler stack) shall not exceed 10 percent opacity. AO, Condition 12. UDAQ specified that opacity observations shall be conducted according to 40 C.F.R. Part 60, Appendix A, Method 9, which is a manual method of measuring opacity requiring a certified opacity inspector to be present. No frequency for Method 9 observations is specified. Such unspecified monitoring is not sufficient to ensure continuous compliance with the opacity limit. This source will be equipped with a continuous opacity monitoring system (COMS), Condition 23 of the AO, and thus UDAQ must require the use this COMS to ensure continuous compliance with the visible emissions BACT limit as stated in 40 C.F.R. §§ 60.47a through 60.49a. Because UDAQ did not, the AO is illegal, and should be rescinded and/or remanded to the agency to ensure continuous compliance with the visible emission limit.

**7. UDAQ Failed to Consider Sufficiently Activated Carbon Injection for Control of Mercury Emissions from IPP Unit 3 in its MACT Determination.**

UDAQ did not perform an adequate analysis of the case-by-case mercury MACT. UDAQ did not require thorough consideration of activated carbon injection for control of mercury in its case-by-case MACT analysis. As sworn testimony and supporting documents relied on or provided at an April 20, 2004 hearing on the Roundup Facility before the Montana Board of Environmental Review establishes, activated carbon injection is an available technology for control of mercury emissions from coal-fired power plants.

UDAQ did not thoroughly evaluate activated carbon injection technology at IPP Unit 3 because "testing at [IPP] Unit 2 has shown high mercury removal efficiency using a baghouse and a wet scrubber." March 22, 2004 Modified Source Plan Review at 149. However, activated carbon injection is an add-on technology that would improve the mercury removal efficiency above what would be achieved with the wet scrubber and baghouse. This justification for failing to consider activated carbon in the MACT analysis is flawed. UDAQ erroneously failed to consider carbon injection in the mercury MACT analysis and the AO should be should be declared illegal, and should be rescinded and/or remanded to the agency for proper MACT analysis.

**8. UDAQ Failed to Set MACT Emission Limits for Other Hazardous Air Pollutants to be Emitted by IPP Unit 3.**

UDAQ did not set enforceable emission limitations for the other hazardous air pollutants (HAPs), aside from mercury, to be emitted by IPP Unit 3. Determination of MACT emission limits is required for all HAPs to be emitted by IPP Unit #3, pursuant to Utah Admin. Code R307-214-2, unless it is technically infeasible to enforce such an emission limit. UDAQ provided no justification that it was technically infeasible to impose and enforce emission limits for any of these HAPs. Indeed, other power plant permits include enforceable emission limits for several HAPs including the PSD permit for the Thoroughbred Generating Station in Kentucky, which included emission limits for beryllium, sulfuric acid mist, hydrogen fluoride and mercury emissions, and the PSD permit for the Roundup Power Project, which included emission limits for hydrogen fluoride, hydrogen chloride, mercury, arsenic, beryllium, cadmium, chromium and manganese. Thus, other permitting authorities have determined it **was** feasible to prescribe and enforce emission limits for these other HAPs.

Accordingly, UDAQ erred and failed to comply with state regulation by not including MACT emission limits for other HAPs to be emitted by IPP Unit 3. Consequently, the AO is illegal, and should be rescinded and/or remanded to the agency for proper MACT analysis.

**9. UDAQ Did Not Properly Set NOx Emission Limits.**

UDAQ requires the installation of ultra low NOx burners, overfire air and selective catalytic reduction (SCR) for NOx control, but sets the BACT emission limit for NOx at 0.07 lb/MMBtu based on a 30-day average. However, these emission limits do not reflect the maximum degree of emissions reduction that can be achieved by the proposed NOx control equipment, as required by Utah law. *See* Utah Admin. Code R307-101-2 & R307-401-6(1). This selection of controls can, and must be required to achieve a lower emission limit. UDAQ's suggestions that stricter limitations are not achievable or have not been required previously are unconvincing given the sound basis in the record and law for mandating tighter emission limitations.

For example, vendor literature shows that lower NOx emission rates can be achieved from the ultra low NOx burners. In addition, expected emission rates reported

in the NOI from the RACT/BACT/LAER Clearinghouse of overfire air and low NOx burners, reflect NOx emission rates of 0.15 lb/MMBtu to 0.33 lb/MMBtu, all lower than the projected 0.35 lb/MMBtu NOx emission rate from the planned NOx combustion controls at IPP Unit 3. *See also,* UDAQ's March 22, 2004 Modified Source Plan Review at 121. Further, the SCR should be able to achieve greater than 80% reduction in NOx emissions. Commercial SCR installations have shown that 90% NOx reductions can be achieved with low ammonia slip, and indeed, up to 95% NOx control can be achieved with SCR.

Further, the $NO_x$ BACT limit of the AO is less stringent than $NO_x$ BACT limits for other recently permitted coal-fired power plants. For example, the Roundup Power Plant in Montana was required as part of the BACT determination to meet a $NO_x$ limit of 0.07 lb/MMBtu on a 24-hour average basis, which is more stringent than IPP Unit #3'S 30-day average $NO_x$ BACT limit.

Thus, UDAQ's $NO_x$ BACT emission limit is not grounded in law or supported by the administrative record. As a result, the AO is illegal and should be rescinded and/or remanded to the agency for proper consideration and regulation of $NO_x$.

**10. UDAQ Failed to Require Sufficient Analysis of the Impacts of IPP Unit 3 on Soils and Vegetation.**

Pursuant to Utah Admin. Code R307-405-6(2)(a)(i)(D), UDAQ must require a PSD permit applicant to provide a full and complete analysis of "the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification." *See also* 40 C.F.R. § 52.21(o)(1) & (2). In response to comments raised about the necessity for such an analysis, UDAQ responded "[t]here were no comments from the public that indicated that their crops were being damaged from the existing Units 1 and 2." Technical Analysis Memo at 4 (Comment 4). However, UDAQ's response fails to address the increased impacts associated with the addition of Unit 3.

Moreover, UDAQ did not evaluate the impacts of pollutants such as ozone, mercury, and $CO_2$, despite numerous scientific studies from Utah and elsewhere establishing that ozone pollution causes harm to native vegetation and crops. *See* May 20, 2004 Comments at 43 (citing scientific literature). UDAQ failed to sufficiently address the potential for impacts to these pollutants on soils and vegetation. *See* Technical Analysis Memo at 5-6 (Comment 6). Therefore, the relevant AO should be declared illegal, should be rescinded, and/or should be remanded to the agency for proper soils and vegetation.

**11. UDAQ Must Analyze the Impacts of All Three IPP Units Together.**

Pursuant to Utah Admin. Code R307-405-6(2) and R307-101-2, UDAQ is required to consider the cumulative effect of all sources on NAAQS, including the Utah

County nonattainment area, and PSD increments. UDAQ suggests that cumulative impacts need not be assessed "unless the impacts from the modified source alone or new source trigger cumulative modeling requirements (i.e. Class I and II SIL)." Technical Analysis Memo at 7 (Comment 12). However, UDAQ is erroneously interpreting the relevant regulatory provisions. Rather, UDAQ is required to include the new proposed Unit 3, as well as the existing Units 1 and 2, in all modeling assessments. Because it does not contain this analysis, the relevant AO is illegal and should be rescinded and/or remanded to the agency for assessment of the impacts of the IPP facility.

**12. UDAQ Failed to Justify the Use of the Second Highest $PM_{10}$ Monitored Value as Representative of Background Concentrations.**

UDAQ failed to adequately justify the use of the second highest $PM_{10}$ monitored value as representative of $PM_{10}$ background concentrations. UDAQ attempts to justify the elimination of the highest 24-hour concentration by suggesting that "[t]he highest $PM_{10}$ concentration monitored . . . occurred during a summertime high wind event, where windblown dust was the main contributor to the concentration." Technical Analysis Memo at 8 (Comment 14). UDAQ's decision lacked sufficient analysis to show that the true cause of the highest monitored $PM_{10}$ value or to show that such occurrences are rare for the area. As a result, the AO for IPP Unit 3 should be declared illegal, should be rescinded, and/or should be remanded to the agency for **proper assessment of** compliance with the $PM_{10}$ NAAQS requirements.

**13. UDAQ Failed to Analyze Properly Impacts on the Utah County $PM_{10}$ Nonattainment Area.**

UDAQ failed to conduct adequate modeling analyses to determine whether IPP's impacts to the Utah County $PM_{10}$ nonattainment area would trigger the requirement for emission offsets under Utah regulation. Pursuant to Utah Admin. Code R307-403-5(1)(a), to determine whether a source located outside a nonattainment area must obtain offsets, UDAQ must assess whether the maximum impact in the nonattainment area would be greater than 1µg/$m^3$ on a yearly basis or greater than 3 µg/$m^3$ on a 24-hour basis "for any combination of $PM_{10}$, sulfur dioxide, and nitrogen dioxide." In keeping with this requirement, UDAQ previously stated that "[u]ntil an acceptable model is available, the evaluation of impacts of sources outside a $PM_{10}$ non-attainment area must add the maximum modeled primary $PM_{10}$ to their maximum gaseous SO2 and gaseous $NO_2$ modeled results." August 7, 2003 Memo, attached to Sierra Club's May 20, 2004 Comments.

However, UDAQ failed to require an acceptable model that accords with Utah Admin. Code R307-403-5(1)(a). Rather, UDAQ states, IPSC "used the turbulence based dispersion option in Calpuff. This option was verbally approved by Kevin Golden before IP[SC] performed the modeling. EPA Region VIII did not have any concerns about the use of this method as part of their comments, so the UDAQ has approved the modeling." Technical Analysis Memo at 8 (Comment 15). Verbal approval from a meteorologist at EPA does not demonstrate compliance with Utah Admin. Rule R307-4.3-5(1)(a).

Therefore, the IPP Unit 3 AO should be declared illegal, should be rescinded, and/or should be remanded to the agency to ensure proper analysis of the impact to the Utah County $PM_{10}$ nonattainment area.

**14. The Proposed Facility Will Contribute to Class I $SO_2$ Increment Violations at Capitol Reef National Park.**

UDAQ violated Utah regulations in issuing the AO because, as currently permitted, the IPP Unit 3 will contribute to violations of the Class I $SO_2$ increment (otherwise known as "maximum allowable increase") in Capitol Reef National Park. The National Park Service conducted a Class I $SO_2$ increment analysis that shows that **existing** sources in Utah are causing violations of the 3-hour average Class I SO2 increment in Capitol Reef National Park. The Park Service presented this analysis to UDAQ electronically before or in November of 2003. On March 25, 2004, the National Park Service submitted a letter to UDAQ that provided, among other things, the Park Service's formal findings that the three-hour average $SO_2$ increment was being violated by existing sources in Utah at Capitol Reef National Park.

IPP's modeling analysis showed that the proposed new unit would affect 3-hour average $SO_2$ concentrations at Capitol Reef National Park. Because the facility would contribute to the increment violations at Capitol Reef National Park (shown by the National Park Service's modeling analysis), UDAQ is prohibited from issuing the AO. *See* Utah Admin. Code R307-401-6(2), R307-405-6(2)(a)(i)(A) and R307-405-6(2)(c).

UDAQ's assessment of cumulative $SO_2$ increment consumption at Capitol Reef National Park and other Class I areas is flawed and cannot be relied on. Specifically, UDAQ improperly allowed the modeling of annual average $SO_2$ emissions rates from all contributing sources, aside from IPP Unit 3, rather than modeling the peak 3-hour average and 24-hour average SO2 emission rates from the contributing sources. UDAQ asserts that "[t]he UDAQ policy for determining short-term emission rates for PSD increment consumption is to use annual average emissions divided by hours of operation." Technical Analysis Memo at 2 (Comment 2). However, this approach is not consistent with the Guidelines on Air Quality Models, incorporated by reference into Utah regulations at Utah Admin. Code R307-410-2, and fails to protect sufficiently Class I airsheds including Capitol Reef National Park.

EPA provided written comments to UDAQ during the public comment period on the IPP Unit 3 ITA that reiterated this policy and stated that "[c]urrent EPA guidance. . . is to use the maximum actual emission rate for each averaging period for the most recent 2 years of operation." May 24, 2004 letter from Richard R. Long, Director, Air Program, EPA Region VIII, to Rick Sprott, Director, UDAQ at 5. EPA also stated that continuous emission monitoring (CEM) data may be used to determine actual short term average emission rates. As is shown by the National Park Service's modeling analysis, as well as by EPA's analysis of peak emissions compared to annual average emissions from contributing sources, UDAQ's approach greatly underestimated $SO_2$ emissions from contributing sources and thus greatly underestimated the amount of $SO_2$ increment being

consumed in Capitol Reef National Park and other areas. Not only is UDAQ's approach unlawful, but it also fails to reflect the emissions that actually affect 3-hour average $SO_2$ concentrations. Further, it is very likely that all of the power plants in the area could be operating at peak emission rates concurrently, especially during a summer heat wave. Yet, UDAQ ignored this likelihood and instead assumed each power plant would be concurrently emitting at much less than peak emission rates. Consequently, UDAQ's assessment is flawed and illegal and cannot be relied on to show no existing $SO_2$ increment violations at Capitol Reef National Park.

UDAQ's arguments against using CEM data are without merit. Technical Analysis Memo at 1. EPA has previously supported the use of CEM data, but has found pairing CEM data in space and time with meteorological data to be inappropriate for an increment analysis. *See* May 24, 2002 EPA Comments on North Dakota Department of Health's Proposed Determination Regarding the Adequacy of the SIP to Protect PSD Increments for Sulfur Dioxide. EPA has also stated that CEM data is the best data available for use in an increment analysis. *See* March 15, 2002 letter from EPA Region VIII to the North Dakota Department of Health. Both of these documents are available at http://www.epa.gov/region08/air/ndair.html.

Moreover, neither state or federal law supports the use of "significant impact levels" (SILs) to find that IPP Unit 3 would not contribute to the $SO_2$ increment violation at Capitol Reef National Park. Because IPP Unit 3 will increase $SO_2$ concentrations at Capitol Reef National Park, it will contribute to the increment violations. EPA policy states that, in an area with an existing increment violation, **any** impact is significant. *E.g., see* April 12, 2002 letter to Terry O'Clair, North Dakota Department of Health, from Richard R. Long, EPA Region VIII. In addition, EPA's longstanding interpretation of the statutory and regulatory provisions for the PSD increments clearly mandate that, in an area with existing PSD increment violations, the violations "must be entirely corrected before PSD sources which affect the area can be approved." 45 Fed.Reg. 52678 (August 7, 1980).

Thus, because the proposed facility will contribute to violations of the Class I $SO_2$ increment in Capitol Reef National Park, the relevant AO should be declared illegal, should be rescinded, and/or should be remanded to the agency for proper analysis of $SO_2$ increment violations and for compliance with emission offset requirements.

**15. UDAQ Failed to Require a Complete Cumulative Class I Increment Analysis for IPP Unit 3.**

Specifically, in its modeling, Intermountain Power Service Company failed to include any emissions from Unit 1 of the Hunter plant. According to PacifiCorp's NOI for its proposed Hunter Unit 4 plant, Units 1-3 were all permitted under the PSD regulations. Thus, all of the $SO_2$ emissions from these three units consume the available $SO_2$ increment. UDAQ's justification for not including Hunter Unit 1 does not comport with state or federal law. Specifically, UDAQ states "Pacificorp's Hunter Power Plant - Unit 1 was permitted under the

PSD regulations. However, the unit began operation in 1978 before the major source baseline date of August 17, 1979." Technical Analysis Memo at 12. However, the major source baseline date for $SO_2$ is defined in state law as January 1, 1975, not August of 1979. See Utah Admin Code R307-101-2 under "baseline date." According to Utah Admin. Code R307-405-5(2)(a), the actual emissions from any source which commenced construction after the major source baseline date consumes the increment. Since Hunter Unit 1 was permitted under the PSD regulations, then the unit must not have commenced construction before the SO2 major source baseline date of January 1, 1975, because the PSD regulations in effect at the time applied to sources commencing construction on or after June 1, 1975. (See 39 Fed.Reg. 42514, December 5, 1974). Thus, Hunter Unit 1 is clearly an increment-consuming source, and UDAQ's failure to include $SO_2$ emissions from Unit 1 of the Hunter power plant was erroneous and illegal.

Also, UDAQ failed to include emissions from the, now approved, Sevier Power Company plant in Sigurd, Utah or any short term $SO_2$ emissions increases expected from the proposed Unit 4 at the Hunter Power Plant. UDAQ also failed to include emissions from the approved Currant Creek natural gas power plant, and UDAQ failed to include $SO_2$ emissions from other proposed or approved energy projects. To be complete, Intermountain Power Service Company's Class I analysis must include all of these sources.

Therefore, the relevant AO should be declared illegal, should be rescinded, and/or should be remanded to the agency for proper and thorough Class I increment analysis.

**16. UDAQ Failed to Address Adequately Significant Visibility Impact to Utah's Class I Areas.**

UDAQ is required to consider and analyze visibility impacts to Class I areas. For example, according to Utah Admin. Rule R307-406-2(3), UDAQ must "insure that source emissions will be consistent with making reasonable progress toward the national visibility goal referred to in 40 CFR 51.3000(a)." Utah Admin. Code R307-406-2(3). UDAQ claims that this provision was enacted only to deal with plume blight. *See* Technical Analysis Memo at 13 (Comment 24). However, this is an erroneous interpretation of UDAQ's duties and fails to ensure progress towards visibility goals.

In fact, the National Park Service has indicated, "emissions from the existing IPP boilers could be diminishing visibility at the potentially affected Class I areas that we manage and adding the proposed new unit could further contribute to this visibility degradation." National Park Service, May 27, 2004, Comment Letter. Yet, contrary to its duties, UDAQ failed to consider the combined visibility impacts of the IPP facility. Therefore, the relevant AO should be declared illegal, should be rescinded, and/or should be remanded to the agency for proper Class I visibility analysis.

**17. UDAQ Failed to Justify Sufficiently IPP Unit 3's Class II $PM_{10}$ Increment Consumption.**

In its April 1, 2004 ITA, UDAQ stated that "[t]he increment analysis indicated that the amount of $PM_{10}$ 24-hour increment consumed by the proposed project would be greater than 50% of the standard; therefore, approval under Utah Administrative Code R307-401-6 (3) from the Utah Air Quality Board would be required." April 1, 2004 ITA at 2. However, the AO never went before the Utah Air Quality Board. Apparently, the company submitted a revised $PM_{10}$ increment analysis on August 26, 2004, well after the close of the public comment period.

The public has not had the opportunity to review the revised $PM_{10}$ increment analysis. Further it appears that in this revised analysis the IPSC has assumed lower emissions from fugitive dust sources associated with IPP Unit 3. Yet, the AO does not include enforceable emission limitations or measures for the lower $PM_{10}$ emission rates used in IPSC's August 26, 2004 revised $PM_{10}$ increment analysis. Without enforceable measures to ensure that fugitive dust emissions from IPP would stay at the reduced levels included in the revised $PM_{10}$ modeling analysis, UDAQ violated state regulation by issuing the AO without obtaining Board approval. Utah Admin. Code R307-401-6(3). As a result, the relevant AO is illegal and should be rescinded and/or remanded to the agency either to obtain Board approval for the consumption of more than 50% of the Class II $PM_{10}$ increment by Unit 3, or for the formulation and presentation to the public for comment, enforceable fugitive dust measures sufficient to show less than 50% $PM_{10}$ increment consumption.

**18. UDAQ Illegally Included an Affirmative Defense Provision for Excess Emissions Due to Startup, Shutdown and Scheduled Maintenance.**

In Condition 24 of the AO, UDAQ illegally included an affirmative defense provision for excess emissions over any emission limit due to startup, shutdown, or scheduled maintenance. Inclusion of this provision in the AO conflicts with state and federal law. Further, UDAQ's decision to include such a provision in the AO is arbitrary and capricious given that the agency properly excluded it from the AO for the Sevier Power Company power plant issued by UDAQ just three days before the IPP Unit 3 AO.

Utah recently initiated rulemaking to adopt affirmative defense provisions as part of state regulation, but no rule has yet been adopted by the state. EPA provided comments to the state during the public comment period on the rule, which ended on November 1, 2004. EPA took issue with several aspects of Utah's proposed affirmative defense provisions and indicated that it would not be able to propose approval of the state rule as a revision to the SIP unless all of its concerns were addressed. October 22, 2004 letter from Richard R. Long, EPA Region VIII, to Rick Sprott, UDAQ at 2. Many of the problematic provisions identified by EPA also exist in the affirmative defense provision included in Condition 24 of IPP Unit 3 AO.

Thus, the affirmative defense provision in the AO is legally flawed and/or conflicts with state law and the federally approved SIP. Accordingly, the AO is illegal and should be rescinded and/or remanded to the agency to expunge the affirmative defense provision in Condition 24 of the AO.

**19. UDAQ Failed to Allow the Public to Comment on Submittals Received After the Public Comment Period.**

Pursuant to Utah Admin. Code R307-401-3:

> [w]ithin 90 days of receipt of a **complete application** including all the information described in R307- 401-2, the executive secretary shall either issue an order prohibiting the proposed construction, installation, modification, relocation or establishment if it is deemed that any part of it is inadequate to meet the applicable requirements of R307, or issue an order permitting the proposed construction, installation, modification, relocation, or establishment pursuant to the requirements of R307-401-5 and 6.[3]

Utah Admin. Code R307-401-3 (emphasis added)..

Following her or his review of a complete application, "the executive secretary shall advertise intent to approve or disapprove in a newspaper of general circulation in the locality of the proposed construction, installation, modification, relocation or establishment." Utah Admin. Code R307-401-4(1). Rather than complying with this procedure, UDAQ advertised its ITA IPSC's PSD permit prior to the receipt of a complete application.

According to UDAQ's Response to Comments, IPSC submitted a revised top-down BACT analysis that includes IGCC and supercritical boiler, *see* Response to Comments at 8 (Comment #14), and a revised $PM_{10}$ modeling analysis on August 26, 2004, *see* Technical Analysis Memo at 9 (Comment #17), after the close of the public comment period. However, these submittals are crucial to the public's analysis of the proposed permit. For example, this August 26, 2004 revised $PM_{10}$ modeling analysis appears to have determined that $PM_{10}$ emissions would be reduced below the threshold requirements to avoid approval of the permit from the Utah Air Quality Board. This alteration of the $PM_{10}$ analysis, as well as the revised top-down BACT analysis, are significant developments and the public should have been allowed to provide input. Accordingly, AO is illegal and should be rescinded and/or remanded to the agency to allow the public to participate in the permitting process based on access to the complete application.

[3] Utah Admin. Code R307-401-3 allows for more time to review the proposal if needed.

**20. DAQ Violated Utah Law and Regulation by Failing to Provide Public Notice and Comment Relative to its August 17, 2006 Approval of Project Changes for Unit 3.**

On August 17, 2006, DAQ approved a request by UAMPS and/or IPSC to change the technology for the proposed Unit 3 from a subcritical to supercritical pulverized coal fired boiler. DAQ approved the change without notifying the public or allowing comment. In doing so, DAQ failed to comply with Utah law and DAQ regulation.

Initially, the Unit 3 permit itself anticipates that the proposed project changes are subject to public notice and comment. Condition 4 of the Unit 3 permit specifically states: "Modifications to the equipment or processes approved by this AO that **could affect the emissions** covered by this AO **must** be reviewed and approved in accordance with R307-401-1."[4] October 15, 2004 Unit 3 Approval Order (DAQE-AN0327010-04) (emphasis added). Rule R307-401-1 in turn "establishes the application and permitting requirements for new installations and modifications to existing installations throughout the State of Utah . . . ." Utah Admin. Code R307-401-1. These requirements specifically provide for public notice and comment "prior to" a decision by the Executive Secretary to approve or disapprove the relevant application. Id. at R307-401-7.[5]

The proposed modification to the Unit 3 design can affect emissions from Unit 3. For example, information already in the record establishes, at a minimum, that installation of a supercritical boiler could for Unit 3 could achieve 17% lower emission rates of carbon monoxide, nitrogen oxides and sulfur oxides as well as up to 15% lower PM emission rates. I.e. Sierra Club May 20, 2004 Comments on Unit 3 Intent to

[4] In his letter approving the Unit 3 technology change, the Executive Secretary stated that, under Condition 7, supercritical boiler technology was "equivalent" to the technology permitted by the Approval Order. August 17, 2006 letter from Executive Secretary to Doug Hunter. However, any equivalency finding does not supersede Condition 4, which requires public notice and comment relative to the modification of the Unit 3 design. This is because modifications can be equivalent. A proper reading of the AO would give meaning to both conditions and would require public notice and comment and a new AO for the technology change, even assuming, without conceding, equivalency.

[5] DAQ also regulations allow interested parties to file a request for agency action when the agency approves the modification of an AO. These regulations define an "initial order" to include a modification to an AO. Utah Admin. Code R307-103-2(1)(a). In turn, any initial order may be contested through a request for agency action. Id. R307-103-3(1). Thus, DAQ regulations acknowledge the significance of any modification of an AO by allowing it to be contested before the Air Quality Board. The same reasoning favors the opportunity for public notice and comment in conjunction with a modification of an AO, such as the Unit 3 design change.

Approve at 22 (citing PSD permit application for the Steag Power Desert Rock Energy facility, a supercritical pulverized coal facility comparable to the Unit 3 facility).[6]

In addition, DAQ regulations require public notice and comment on the Unit 3 design modification. Rule R307-401-8(4) allows the Executive Secretary to accommodate the "staged construction of a large source" by "issu[ing] an order authorizing" the proposal based on general plans. However,

> [s]ubsequent detailed plans will then be processed as prescribed in this paragraph. For staged construction projects the previous determination under R307-401-8(1) and (2) will be reviewed and modified as appropriate at the earliest reasonable time prior to commencement of construction of each independent phase of the proposed source or modification.

Utah Admin. Code R307-401-8(4). Rules R307-401-8(1) and (2) reference the process by which the Executive Secretary approves or disapproves a permit application. As stated above, a condition precedent to the issuance of such an order is that the public be notified of and given the opportunity to comment prior to any AO. Id. at R307-401-7.

IPSC's own characterization of the Unit 3 project changes implicates Rule R307-401-8(4). As the corporation states, it is "preparing bids for the engineering and procurement phase of construction" of Unit 3. August 4, 2006 Letter from Doug Hunter to Rick Sprott. Based on this explanation of the status of Unit 3, Rule R307-401-8(4) is triggered and DAQ must review the detailed plans relative to supercritical technology prior to the next "phase" of "construction."[7]

Finally, the proposed project changes cannot be considered "equivalent" to the proposal envisioned by the AO. As DAQ confirms, the AO is based on the IPSC's Notice of Intent (NOI) filed with DAQ and information provided through out the subsequent process. I.e. Unit 3 AO, Condition 6. The NOI itself plainly envisions installation of a subcritical boiler. Indeed, in reviewing the NOI and in response to public comment, DAQ declared that supercritical technology would "**not be appropriate**" for

---

[6] At the time, DAQ took issue with the fact that the submission was only a permit application for the Desert Rock facility. See October 14, 2004 DAQ memo "Response to Comments received on IPSC Intent to Approve Number DAQE-IN327010-04" at 8-9. Had DAQ accepted public comment on IPSC's modification request as required by Utah law, the conservation groups would have submitted the proposed permit EPA issued in July 2006 for the Desert Rock facility, which proposes stricter emission limits for that supercritical plant – emissions limits that should even be more rigorous for Unit 3. Sierra Club hereby references and incorporates that the Desert Rock proposed permit and all supporting materials available at: http://www.epa.gov/region9/air/permit/desertrock/

[7] Conservation groups point out this requirement based on IPSC's characterization of its Unit 3 proposal. Conservation groups in no way concede that IPSC is in compliance with Condition 8 of the Unit 3 AO, and, indeed, request that the Executive Secretary withdraw the AO because it is, by its own terms, out of date.

the Unit 3 facility. October 14, 2004 DAQ memo "Response to Comments received on IPSC Intent to Approve Number DAQE-IN327010-04" at 8-9 (emphasis added). As a result, DAQ cannot now suggest that approval of a technology it once refused to considered for Unit 3 is equivalent to the proposed project as set forth in the NOI and AO.

Moreover, if, as IPSC suggests, the maximum heat input capacity of Unit 3 will remain constant, the generating capacity of the facility would increase because of the greater efficiency of the supercritical boiler.[8] As a result, the proposed design change cannot be considered "equivalent" to the prior design. In addition, a Unit 3 supercritical boiler should achieve significantly lower emission rates. Results such as these must be considered as part of any appropriate BACT analysis for the technology change, and be reflected in lower emission limits in the permit regardless of whether a supercritical boiler or IGCC is ultimately chosen as BACT. This again means that the subcritical and supercritical technologies cannot be deemed equivalent and a new AO process is necessary.

**21. DAQ Violated Utah Law and Regulation by Approving the Project Design Changes Without Completing Required Modeling and Analyses and Without Changing Permit Terms and Conditions.**

Initially, Sierra Club underscores the disadvantage it faces because there has not been any public notice and comment associated with the project design changes. By failing to elicit public comment on this proposed change, DAQ has kept the public in the dark about the details of the design modification. The public has not been able to question the IPSC data, has no knowledge of the source and basis for this information, and has not been able to request, through comment, clarification of the analysis or additional analysis. Moreover, Sierra Club has not had the time to fully analyze the proposed project changes and the extent to which they implicate Utah law and regulation. As a result, Sierra Club's causes of action relative to the project design changes are necessarily based on incomplete information. Sierra Club hereby reserves the right to amend this request for agency action based on information that comes to light as a virtue of this process.

Sierra Club hereby references and incorporates all causes of action listed above and reiterates that they still apply to DAQ's approval of the original project and to project changes and to the decision making that lead to these approvals. In addition, Sierra Club reiterates that, in considering the project changes, DAQ was required, as of August 2006, to:

- require and/or undertake thorough evaluation of the emission limitations achievable using other available methods, systems and techniques including

[8] This increase in generating capacity could range from a low estimate of 4% up to 10%, meaning an increase in generating capacity from 990 mega watts to 1,045 mega watts (gross).

integrated gasification combined cycle (IGCC) combustion technology as part of the BACT (best available control technology) analysis for the Unit 3 facility. In August 2006, the Department of Energy reported that there are some two dozen IGCC plants in various stages of development across the nation.[9] That same month, Xcel energy announced that it will build an IGCC facility in the interior West.[10] The significant changes proposed by IPSC require examination of emission limitations achievable at Unit 3 with available technology.

- require and/or undertake thorough evaluation of the emission limitations achievable using supercritical technology.
- reexamine appropriate emission limits and require lower emission limitations on carbon monoxide, nitrogen oxides, sulfur oxides and particulate matter, as well as carbon dioxide. For example, the criteria pollutant emission limitations EPA recently proposed for the Desert Rock Energy Facility, which will employ supercritical boilers, are appreciably lower than those DAQ has established for Unit 3.[11] In addition, IPSC's consultant, CH2M Hill, suggests that that lower emissions on an annual basis could be achieved. Response to Public Comments Received by UDAQ on the Daft Approval Order IPP Unit 3, August 2004 at 15.
- reinitiate all relevant processes and require or undertake all required analyses and/or modeling given that project changes modify the generating capacity of the unit. On this basis, DAQ should reconsider all permit terms and conditions.
- require new dispersion modeling based on any change in stack height. Although IPSC asserts stack parameters will not change, the corporation does not commit itself to holding stack height constant. The AO specifies a stack height of "at least" 712 feet and a stack height of 712 feet was modeled. But if stack height were to increase with the installation of the proposed supercritical boiler, dispersion modeling results would change.

**22. The Approval Order for Unit 3 is Now Invalid Because Construction Did Not Commence Within 18 Months of the Approval Order, and the Approval Order Has Automatically Expired.**

The Executive Secretary signed the Approval Order for Unit 3 on October 15, 2004. The Utah PSD regulations provide, under "Source Obligations," that "the provisions of 40 C.F.R. 52.21(r), effective March 3, 2003, are hereby incorporated by reference." R307-405-19(1). That federal regulation, in turn, provides that:

---

[9] The EPA Report is found at http://www.netl.doe.gov/coal/refshelf/ncp.pdf, while a press release announcing the report is found at http://www.netl.doe.gov/publications/press/2006/06046-Coal-Fired_Power_Plants_Database.html

[10] Information on Xcel's announcement can be found at: http://www.westgov.org/wga/press/igcc8-16-06.htm and http://www.xcelenergy.com/XLWEB/CDA/0,3080,1-1-1_15531_26314-28427-0_0_0-0,00.html

[11] The EPA proposed Desert Rock permit is available at http://www.epa.gov/region9/air/permit/desertrock/desert-rock-proposed-permit.pdf.

> Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Administrator may extend the 18-month period upon a satisfactory showing that an extension is justified.
>
> 40 C.F.R. 52.21(r)(2).

The AO is also subject to this federal regulation, which has been in effect since at least 1975, by the terms of the AO itself. The AO expressly provides that "[t]his AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307." AO at 14.

Twenty-eight months have now passed since the Executive Secretary signed the AO for Unit 3. Upon information and belief, construction has not yet commenced, notwithstanding that there has been no stay of the AO since it was approved. The Administrative Record for this AO, which UDAQ compiled and made available to the parties for duplication on February 6, 2007, and obtained in electronic format by Sierra Club on February 15, 2007, shows that there has been no extension of the 18-month period for automatic invalidation of the AO granted to IPSC.

Because more than 18 months have passed since the AO was issued on October 15, 2004, and no extension has been granted, the AO is now invalid, having expired automatically on or about April 15, 2006. Accordingly, IPSC must submit a new NOI to DAQ and re-initiate the AO process for approval to construct Unit 3.

In addition, the terms of the AO itself provide that "[i]f construction and/or installation has not been completed within eighteen months from the date of this AO, the Executive Secretary shall be notified in writing on the status of the construction and/or installation. At that time, the Executive Secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO in accordance with R307-401-11." AO at 5. R307-401-11, now renumbered as R307-401-18, provides that

> Approval orders issued by the executive secretary in accordance with the provisions of R307-401 shall be reviewed eighteen months after the date of issuance to determine the status of construction, installation, modification, relocation or establishment. If a continuous program of construction, installation, modification, relocation or establishment is not proceeding, the executive secretary may revoke the approval order.

The Administrative Record also reflects that IPSC did not notify the Executive Secretary of the status of the project as required under the terms of the permit, and that the Executive Secretary did not conduct the review required by regulation in April 2006.

This review was mandatory under the regulations. The lack of a review prevented the DAQ from assessing whether any changed circumstances warranted revocation of the AO after eighteen months in which construction had not begun. The absence of that review, coupled with the automatic expiration of the approval to construct under R307-405-19(1) and corresponding source obligations in the federal regulations, require that IPSC now submit a new NOI to DAQ to obtain approval to construct Unit 3.

**III. Request For Relief**

Based on the above, the Sierra Club respectfully requests that the Air Quality Board declare the AO and AO modification for the proposed expansion to the Intermountain Power Plant illegal and invalid, revoke the AO for the additional unit, and/or remand the AO to UDAQ with instructions that the agency comply with the law and undertake or require the proper analysis as part of the permit and permitting process.

Dated: February 16, 2007

___/s/_____
JORO WALKER
DAVID BECKER
Attorneys for Sierra Club

CERTIFICATE OF SERVICE

I hereby certify that on this 16th day of February 2007, I caused a copy of the foregoing Second Amended Request for Agency Action to be emailed to the following:

Fred G. Nelson
Counsel, Utah Air Quality Board
160 East 300 South, 5th Floor
Salt Lake City, Utah 84114
fnelson@utah.gov

Christian Stephens
Paul McConkie
Assistant Attorneys General
150 North 1950 West
Salt Lake City, Utah 84114
cstephens@utah.gov
pmcconkie@utah.gov

E. Blaine Rawson
George Haley
Holme Roberts & Owen
299 S. Main Street #1800
Salt Lake City, Utah 84111
bliane.rowson@hro.com
haleyg@hro.com

Fred Finlinson
11955 Lehi-Fairfield Road
Saratoga Springs, Utah 84043
f2fwcrf@msn.com

Michael Keller
Matthew McNulty
VanCott Bagley
50 South Main, Suite 1600
Salt Lake City, Utah 84114
mkeller@vancott.com
mmcnulty@vancott.com

Martin Banks
Stoel Rives
201 West main, Suite 1100
Salt Lake City, Utah
mkbanks@stoel.com

Michael Jenkins
PacifiCorp
201 South Main, Suite 2200
Salt Lake City, Utah
michael.jenkins@pacificorp.com

Brian Burnett
Callister Nebeker
10 West South Temple, Suite 900
Salt Lake City, Utah 84133
brianburnett@cnmlaw.com

__/s/_____
DAVID BECKER
Attorney for Sierra Club